

NEW SPECIES AND RECORDS OF XEROMEGACHILE  
AND DEROTROPIS<sup>1</sup>

(Hymenoptera: Megachilidae)

THEODORE B. MITCHELL

*North Carolina State College*

The subgenus *Xeromegachile* comprises the largest group of species of *Megachile* in the nearctic region, with about 30 originally included (Mitchell, 1934:305). As the name suggests, they are associated with a xerophytic type of vegetation, and consequently are much more abundantly represented in the western states than in the eastern United States. The center of origin evidently is in the western United States, and the known range of the group extends but little to the north or south into Canada and Mexico. Only five species occur in the eastern United States, and none are known from any other part of the world.

Closely related to *Xeromegachile* are two smaller groups, *Megachiloides* and *Derotropis*. *Megachiloides* was originally described as a new genus (Mitchell, 1924:154), with but a single species, *oenotherae* Mitchell, included. Its generic distinctiveness was based in part on the extreme length of the glossa and labial palpi, which in *oenotherae* cannot be carried folded beneath the head as in most leaf-cutters, but instead extend back from the head between the legs, nearly to the tip of the abdomen. Later it was found that other species, evidently closely related to *oenotherae*, did not exhibit this condition to the same degree, and it seemed best to assign it a subgeneric rather than a generic rank. Only three species are now included in the group, *oenotherae*, the genotype, and eastern in distribution, *amica* Cresson, from Texas, and *umatillensis* Mitchell, occurring in Washington and Oregon.

The species of *Derotropis* were originally included in *Megachiloides*, but in this group the glossa and labial palpi are more nearly of ordinary length, and the males, at least, are very hard to distinguish from *Xeromegachile*. Differences in the dentition of the mandibles make it possible to separate the females of all three groups easily, but the males do not share this ease of recogni-

<sup>1</sup> Contribution from the Entomology Department, North Carolina Agricultural Experiment Station, Raleigh, North Carolina. Published with the approval of the Director of Research as Paper No. 648 of the Journal Series.

tion. Thus the females can be separated by the following characteristics (for figures, see Mitchell, 1936, Pl. VIII) :

*Xeromegachile*: Three distinct mandibular teeth, and a short bevelled cutting edge extending from the third tooth to the inner angle; segments 1 and 2 of labial palpi about equal in length.

*Megachiloides*: Two distinct apical mandibular teeth, the third barely distinguishable or absent, and with a rather long cutting edge extending from the position of the third tooth to the inner angle; segment 2 of labial palpi 2-4 times longer than segment 1.

*Derotropis*: Two distinct apical mandibular teeth, and a very long bevelled cutting edge extending from the *second* tooth to the inner angle; segment 2 of labial palpi usually somewhat longer than segment 1.

With the males we are forced to rely on the relative length of the first and second segments of the labial palpi, and this is reliable only in separating *Megachiloides* from the other two. Also, the degree of sexual dimorphism is such that no association of the sexes is possible by morphological or any other visible characters. Consequently it is necessary to key out the males of *Xeromegachile* and *Derotropis* together, and males assigned to *Xeromegachile* sometimes prove to belong to the other group when an association of the sexes has been achieved.

In this paper a number of apparently new species in these groups are described, some new state records are given, and a key to some of the easily confused males of *Xeromegachile* and *Derotropis* is included. The new species were found in collections received from the University of Arizona, at Tucson, and the California Insect Survey, University of California, at Berkeley.

***Megachile (Xeromegachile) crandalli* Mitchell, new species**

*Female*.—Size: Length 9 mm.; width of abdomen 4 mm.; anterior wing 7 mm.

*Structure*: Length and breadth of face subequal; eyes subparallel; clypeal margin finely denticulate; mandibles 4-dentate, with a cutting edge between the third and inner teeth; basal segment of flagellum slightly longer than pedicel and second segment, following segments successively very slightly longer; lateral ocelli subequally distant from eyes and margin of vertex; cheeks subequal to eyes in width; hind metatarsi nearly as broad as their tibiae, slightly longer than the following segments combined; apical margins of abdominal terga rather abruptly depressed; sixth tergum nearly straight in profile, with abundant subappressed pubescence. *Sculpture*: Punctures rather coarse, deep and closely crowded on clypeus, becoming somewhat finer but still very close on face and vertex, those on cheeks becoming somewhat more shallow and obscure, but still very close; fine and densely crowded on mesonotum except for a small area on each side where the punctures are somewhat more distinct, those on scutellum slightly more coarse and not so crowded; fine and densely crowded on pleura above,

but becoming more coarse and sparse below; very fine and densely crowded on abdominal terga 1-3 and on 6, but slightly more distinct and coarse on 4-5. *Color*: Black; wings subhyaline, veins and stigma brownish-ferruginous; tegulae piceous, becoming narrowly testaceous anteriorly; antennae, mandibles and legs black in general; spurs testaceous. *Pubescence*: Whitish over most of head and thorax, quite dense and rather long on face and clypeus, becoming shorter and more sparse and largely fuscous on vertex; white and rather long and dense on thorax laterally and beneath, but very short and largely fuscous on mesonotum and scutellum, with a line of dense creamy tomentum on mesonotum laterally and posteriorly, and a pair of similar narrow oblique lines anteriorly; white on legs, the front and mid tarsi with rather conspicuous posterior white fringes; abdominal terga 2-5 with entire whitish apical fasciae, discs of these segments with very short and inconspicuous but abundant fuscous hairs, those on the sixth whitish, becoming brown at tip; scopa entirely white.

*Holotype*, female, CORNELIO, SONORA, MEXICO, September 9, 1938 (R. H. Crandell). [University of Arizona.]

This species resembles *parksi*, *integra* and *brimleyi* in having the apical margin of the clypeus denticulate. These four can be separated by the following key:

1. Scopa black on fifth and sixth sterna.....*parksi* Mitchell  
Scopa largely or entirely pale on fifth sternum..... 2
2. Punctures of mesonotum very fine and densely crowded, becoming distinct only adjacent to notauli.....  
.....*crandalli* Mitchell, new species  
Punctures of mesonotum more coarse and distinct, with evident shining interspaces either medially or laterally..... 3
3. Punctures fine and close on mesonotum medially, becoming coarser and more widely separated laterally.....*integra* Cresson  
Punctures of mesonotum well separated medially as well as laterally .....*brimleyi* Mitchell

**Megachile (Xeromegachile) pararubi** Mitchell, new species

*Female*.—Size: Length 11 mm.; breadth of abdomen 4.5 mm.; anterior wing 7.5 mm.

*Structure*: Length of face somewhat less than distance between eyes above; eyes slightly convergent below; clypeal margin straight and entire; mandibles 4-dentate, a short cutting edge between third and inner teeth; basal segment of flagellum subequal to pedicel in length, second about equal to the first, following segments very slightly longer; lateral ocelli subequally distant from eyes and margin of vertex; cheeks subequal to eyes in breadth; hind metatarsi somewhat longer than the following segments combined, shorter but nearly as broad as the tibiae; apical margins of abdominal terga narrowly depressed, the more posterior segments deeply so; sixth tergum straight in profile, with no erect hairs visible, the surface on each side of the mid line somewhat concave, resulting in a condition somewhat similar to that in *Megachile rubi* Mitchell. *Sculpture*: Punctures rather fine but deep and very close over most of clypeus, apical margin medially shining

and impunctate; more distinctly separate but still close on face, fine and very close on vertex medially, becoming more distinctly separated laterally, very fine and close on cheeks, becoming slightly more coarse and distinct below; mesonotum rather dull, punctures deep and distinct but rather fine, quite close over most of disc, but slightly separated in center, those on scutellum quite deep and distinct, more close and coarse posteriorly, rather sparse in center anteriorly; fine and crowded on pleura above, becoming more coarse deep and distinct, but still close, below; very fine and densely crowded on the more basal abdominal terga, becoming somewhat more distinct but still very close on fourth and fifth, those on the sixth largely obscured by tomentum. *Color*: Black; wings subhyaline, veins and stigma fuscous; tegulae brownish, becoming testaceous anteriorly and piceous on inner margin; antennae, mandibles and legs black; spurs ferruginous. *Pubescence*: White over most of head and thorax, quite dense on face and clypeus and on thorax laterally, posteriorly and beneath, vertex with very short thin and somewhat darker hairs, and mesonotum very thinly pubescent, whitish and subappressed over apical half, more fuscous but very short and inconspicuous over posterior half, the lateral and posterior margins with dense whitish tomentum; scutellum largely pale pubescent; legs entirely white pubescent, the front and mid tibiae with rather conspicuous posterior fringes; abdominal terga 1-5 with entire, quite dense, whitish apical fasciae, pubescence of the discs very short and inconspicuous, but dark in general; sixth tergum with quite dense whitish tomentum, becoming brownish at tip; scope white, black on sixth sternum.

*Holotype*, female, EAST END OF ROOSEVELT LAKE, ARIZONA August 23, 1953 (G. D. Butler). Paratype, 1 female, topotypical. [University of Arizona.]

The chief differences between *pararubi* and the eastern species, *rubi*, are as follows:

*M. rubi*: Pubescence of mesonotum more elongate, erect and conspicuous, black over most of disc; punctures well separated in center of mesonotum; abdominal terga 2-5 with erect black pubescence, the apical fasciae very narrow, clear white.

*M. pararubi*: Pubescence of mesonotum very short, thin and inconspicuous, largely pale; mesonotum finely and very closely punctate throughout, punctures only slightly separated in center of disc; pubescence of terga 2-5 very short and inconspicuous, largely pale.

**Megachile (Xeromegachile) pseudolegalis** Mitchell, new species

*Male*.—Size: Length 11 mm.; breadth of abdomen 4 mm.; anterior wing 8 mm.

*Structure*: Face very slightly longer than distance between eyes above; eyes subparallel; mandibles quite robust, with a subapical tooth approximate to apical tooth, and a broad straight margin to inner angle, subbasal inferior projection narrowly rounded at tip; basal segment of flagellum slightly longer than broad, considerably longer than pedicel, apical segment slightly dilated and flattened; lateral ocelli considerably nearer eyes than to margin of vertex; cheeks somewhat broader than eyes; front coxal spines rather

short, subtriangular, with a patch of short reddish bristles at base; front femora somewhat dilated, carinate beneath medially; front metatarsi narrower than their tibiae, scarcely at all dilated or excavated anteriorly, second and following segments slightly narrower; apical margins of abdominal terga considerably depressed; carina of sixth tergum subtriangular, margin irregularly crenulate, median carinate teeth of apical margin of the tergum rather widely separated, lateral teeth acute but very short and obscure; seventh tergum with a rather slender and acute median spine; lateral portions of presternite of retracted fifth sternum subtriangular, apical rounded sclerites quite small, densely covered with whitish pubescence, median portion of presternite considerably narrowed, medasternite very broad and quite short, densely covered with short setae, the poststernal strip nearly straight medially, but slightly out-curved on each side, with a rather extensive tuft of short setae medially; lateral portions of presternite of sixth sternum with an apical tuft of rather long white hairs, medasternal areas densely covered with elongate recurved bristles, but these becoming much reduced on inner portions posteriorly, poststernal lobe about twice as broad as long, lateral angles narrowly produced and elongate; gonostyli of genital armature compressed apically, but tip somewhat thickened and rounded, bearing a quite strong tuft of recurved hairs, and with numerous hairs along inner surface toward base; penis valves very slightly exceeding gonostyli, somewhat flattened apically, volsellae quite robust, obliquely truncate apically. *Sculpture*: Punctures very fine and close on clypeus beneath beard and on face below ocelli, becoming somewhat more coarse but still very close on vertex and cheeks above, these becoming finely rugoso-punctate below; mesonotum and scutellum with densely crowded punctures laterally, these becoming somewhat more coarse, shallow and more widely separated in center, pleura with fine crowded punctures throughout; punctures very fine and close on basal abdominal tergum, close in general on second, but becoming more distinctly separated on 3-5, surface of sixth above carina irregularly and rather shallowly rugoso-punctate. *Color*: Black; wings subhyaline, veins and stigma piceous; tegulae brownish-piceous, with anterior margin more or less yellowish-hyaline; outer faces of front femora and tibiae blackish, upper and lower faces of femora more ferruginous, and inner surface of tibiae ferruginous, tarsi narrowly yellowish anteriorly, with hind margin rather broadly blackened and anterior margin narrowly so; mid and hind legs black; spurs testaceous. *Pubescence*: White and quite long and dense over most of head and thorax, but vertex with considerable fuscous pubescence, and mesonotum with a median dark patch; front tarsal fringe with numerous black hairs beneath, hairs composing the fringe somewhat longer than width of tarsal segments, mid tarsal fringe entirely white and much longer; abdominal terga 2-5 with dense entire white apical fasciae, discs with numerous long erect hairs, largely white but with a few dark hairs interspersed on the fourth and fifth terga.

*Holotype*, male, FOUR MILES EAST OF NIGHTINGALE, RIVERSIDE COUNTY, CALIFORNIA, April 24, 1950 (C. D. MacNeill). [University of California.]

**Megachile (Xeromegachile) macneilli** Mitchell, new species

*Male*.—Size: Length 12 mm.; breadth of abdomen 4 mm.; anterior wing 8 mm.

*Structure*: Length and breadth of face subequal; eyes subparallel; mandibles rather robust, conspicuously 3-dentate, subbasal inferior projection acutely pointed; basal segment of flagellum rather slender, longer than pedicel, apical segment flattened and rather broadly dilated; lateral ocelli slightly nearer margin of vertex than to eyes; cheeks subequal to eyes in width; front coxal spines elongate triangular, acute, with a patch of reddish bristles at base; front femora rather broadly dilated, carinate beneath medially; front metatarsi slightly dilated, but somewhat narrower than their tibiae, anterior margin very slightly excavated, following joints successively narrower; apical margins of abdominal terga distinctly depressed, more so laterally; carina of sixth tergum obscurely and obtusely angulate medially, with a few irregular crenulations on each side, median teeth of apical margin of the tergum widely separated, carinate, lateral teeth very obscure; seventh tergum rather broadly triangular, not spined; lateral portions of presternite of retracted fifth sternum more quadrangular, with the latero-apical rounded sclerites covered with rather dense elongate pubescence, median portion of presternite narrow and elongate, medasternite quite extensive, broad, densely covered with very short setae, poststernal strip nearly straight, with a very slight median pencil of bristles; medasternal area of sixth sternum subtriangular, quite densely covered with elongate setae which are more or less recurved at tips, poststernal lobe broad and short, lateral angles produced and narrowly acute; gonostyli of genital armature compressed apically, with tips somewhat recurved, narrowly rounded and bearing a few elongate hairs, slightly exceeded by the rather robust penis valves; volsellae short, triangularly acute. *Sculpture*: Punctures of clypeus beneath beard very minute and well separated but not sparse, these becoming more coarse and close on face below ocelli, irregularly scattered and variable as to size between eyes and ocelli, becoming somewhat more coarse on margin of vertex, close over most of cheeks; fine and close on mesonotum laterally and anteriorly, becoming somewhat more coarse and rather widely separated medially, those on scutellum shallow but rather coarse and well separated; close and rather fine on pleura; fine and very close on basal abdominal tergum, but becoming more distinctly separated and slightly more coarse on the more apical segments, but very minute and irregular above carina on sixth tergum. *Color*: Black; wings subhyaline, veins and stigma piceous to brown-testaceous; tegulae brownish-piceous; outer face of front femora and tibiae black, but these otherwise reddish-testaceous, front tarsi more yellowish, with posterior margin slightly darkened; spurs reddish-testaceous. *Pubescence*: White and rather long and dense over most of head and thorax, but vertex and mesonotum medially with considerable fuscous pubescence, front tarsal fringe with numerous black hairs beneath, mid tarsal fringe elongate and entirely white; abdominal terga 1-2 entirely white pubescent, terga 2-5 with dense entire white apical fasciae, discs of 3-5 with numerous erect black hairs in addition to some more or less whitish pubescence; sixth dorsally largely covered with thin pale tomentum.

*Holotype*, male, FOUR MILES EAST OF NIGHTINGALE, RIVERSIDE COUNTY, CALIFORNIA, April 24, 1950, (C. D. MacNeill). [University of California.]

**Megachile (Xeromegachile) stoddardensis** Mitchell, new species

*Male*.—Size: Length 6 mm.; breadth of abdomen 2 mm.; anterior wing 5 mm.

*Structure*: Length and breadth of face subequal; eyes very slightly convergent below; mandibles 3-dentate apically, basal inferior dilation triangularly acute; basal segment of flagellum subequal to pedicel, apical segment somewhat dilated; lateral ocelli subequally distant from eyes and margin of vertex; cheeks subequal to eyes in width; front coxal spines rather slender, with a small tuft of yellowish bristles at base; front femora somewhat dilated, carinate beneath apically; front metatarsus slender, scarcely dilated, but second segment somewhat flattened and dilated, being no broader however than metatarsus; apical margins of abdominal terga considerably depressed toward sides; carina of sixth tergum broadly triangular, the margin smooth and straight on each side of the median obtuse angle; apical margin of sixth tergum with a pair of broadly carinate median teeth, lateral teeth hardly evident; seventh tergum with a rather short but distinct and slender median spine; presternite of retracted fifth sternum broadly triangular on each side, much narrowed medially, with a rounded short pubescent apical sclerite on each side, metasternal area broadly ovoid, densely covered with short dilated setae, the poststernal strip nearly straight, with a very short median pencil of setae; medasternal areas of sixth sternum densely covered with more elongate setae which are in part slightly reflexed at tip, the poststernal lobe broad and quite short, somewhat angulate on each side; gonostyli of genital armature rather slender, somewhat recurved and narrowly rounded at tip, bearing a few whitish hairs apically, penis valves slender, slightly exceeding gonostyli, volsellae short, triangularly acute. *Sculpture*: Face and clypeus hidden by dense pubescence, punctures of vertex and cheeks above rather fine but well separated, becoming almost crowded below, punctures on mesonotum and scutellum distinct, rather deep but fine, close laterally, becoming rather widely separated medially; pleura closely punctate; abdominal terga shining, punctures very fine, well separated but hardly sparse, becoming rather close and somewhat more coarse on sixth tergum above the carina. *Color*: Black, wings hyaline, veins and stigma ferruginous to piceous; tegulae testaceous; front tarsi pale testaceous, metatarsus slightly blackened on both margins, legs otherwise black but the apical tarsal segments somewhat reddened on mid and hind legs; spurs yellowish. *Pubescence*: Largely white and rather dense on head and thorax, but vertex with a few dark hairs, and front metatarsi with a few dark hairs beneath the posterior fringe which is somewhat broader than width of the joint; abdominal terga 1-5 with entire and rather dense white apical fasciae, discs with rather abundant erect whitish pubescence.

*Holotype*, male, STODDARD MOUNTAIN, SAN BERNARDINO COUNTY, CALIFORNIA, April 28, 1949. (Linsley, McSwain, and Smith.) [University of California.]

This species resembles superficially *Megachile (Derotropis) astragali* Mitchell, but in that species the front tarsi are entirely black, with the metatarsi much shorter than those in *stoddardensis*. In addition to other minor differences, the seventh tergum in *astragali* is not so distinctly spinose as in this species.

The following key to males separates the newly described species from the other species of *Xeromegachile* and *Derotropis* having unmodified anterior tarsi:

1. Distance between lateral ocelli and posterior margin of vertex much exceeding that between lateral ocelli and inner margin of eye (ratio about 3:2)..... 2  
     Distance between lateral ocelli and posterior margin of vertex only slightly exceeding that between ocelli and eyes, if at all..... 3
2. Mandibles 3-dentate; legs more or less ferruginous.....  
     .....*deflexa deflexa* Cresson  
     Mandibles 4-dentate; legs dark.....*deflexa coreopsana* Mitchell
3. Front tarsi entirely black or piceous..... 4  
     Front tarsi yellowish, at least in part..... 5
4. Larger (11-12 mm.); mesonotum dull, densely tessellate, punctures invident.....*mucorosa* Cockerell  
     Smaller (8 mm.); mesonotum shining between the deep and distinct punctures.....*astragali* Mitchell
5. Front tarsal fringe composed in part of black hairs..... 6  
     Front tarsal fringe composed entirely of yellowish or white hairs ..... 8
6. Smaller (7 mm.); pubescence of mesonotum entirely pale.....  
     .....*stoddardensis* Mitchell, new species  
     Larger (11-12 mm.); mesonotum with a patch of fuscous hairs.... 7
7. Median mandibular tooth approximate to the apical tooth, with a wide space separating it from the inner angle; clypeus finely and densely punctate beneath the dense white beard.....  
     .....*pseudolegalis* Mitchell, new species  
     Median mandibular tooth only slightly nearer the apical tooth than to the inner angle; clypeus smooth and shining, the punctures minute and obscure, beneath the dense white beard.....  
     .....*macneilli* Mitchell, new species
8. Pubescence of vertex and mesonotum entirely pale; mesonotum dull, densely tessellate, punctures in center of disc shallow and obscure .....*legalis* Cresson  
     Vertex or mesonotum with some darker hairs; punctures of mesonotum medially deep and distinct, interspaces not so densely tessellate ..... 9
9. Apical margin of third abdominal tergum, as well as that of the fourth and fifth, abruptly and deeply depressed; hairs of vertex largely pale, those of mesonotum somewhat darker in center of disc .....*dakotensis* Mitchell



Apical margin of third abdominal tergum not depressed medially; vertex with intermixed blackish and yellowish hairs, mesonotum with a large central blackish patch.....*integrella* Mitchell

MEGACHILE (DEROTROPIS) SUBANOGRÆ Mitchell

The possibility has been suggested (Mitchell, 1944:139) that *M. (Xeromegachile) maurata* Mitchell is the male of *M. (Derotropis) subanograe*. Additional records of these collected at the same time and place, and on the same host plant, would seem to make this almost conclusive. It remains to discover the nesting sites while the males are still in flight to prove this relationship. The female (*subanograe*) was described as belonging in the subgenus *Megachiloides* (Mitchell, 1934:344), but was later transferred to *Derotropis* when that subgenus was described (Mitchell, 1936:156). The male (*maurata*) was described later (Mitchell, 1937:369), and in the subgenus *Xeromegachile*.

Following are California records of males and females collected together: Piñon Flat, San Jacinto Mountains, May 18, 1939 (Ross & Linsley, on *Sphaeralcea ambigua*); Ribbonwood, San Jacinto Mountains, May 21, 1940 (Michener). Additional males were collected at Mohave, Kern County, April 24, 1949 (C. D. MacNeill) and Westgard Pass, Inyo County, June 19, 1953 (J. W. MacSwain, on *Encelia*). A female was collected at Lee County, Nevada, May 25, 1940 (G. E. Bohart).

Previous state records include Wyoming (type locality), Texas, California, Utah and Nevada, May–July.

MEGACHILE (DEROTROPIS) ASTRAGALI Mitchell

The type series of four males and one female was collected in the Mohave Desert (Mitchell, 1938:177). Following are some additional California records: 2♂♂, Yermo, San Bernardino County, April 28, 1949 (Linsley, MacSwain & Smith); 1♂, Kramer Junction, San Bernardino County, April 30, 1953 (R. O. Schuster); 1♂, Victorville, San Bernardino County, May 2, 1953 (G. A. Marsh); and 1♂, 2 miles north of Kramer Junction, April 30, 1953 (P. H. Timberlake).

The following records appear to be new for each of the respective states. New locality records within the previously known range are not included.

MEGACHILE (XEROMEGACHILE) ALATA Mitchell

Arizona: 1♀, Tucson, May 17, 1954 (Butler, on *Prosopis*). Also collected in April on California Poppy. Recorded previously from California.

## MEGACHILE (XEROMEGACHILE) BRADLEYI Mitchell

California: 5 ♀♀, Antioch, September (G. E. & R. M. Bohart; 1936) (P. D. Hurd: 1947 and 1949). Previously recorded from Utah and Nevada, September.

## MEGACHILE (XEROMEGACHILE) CASADAE Cockerell

California: 1 ♂, Borego, San Diego County, April 5, 1940 (R. M. Bohart). Arizona: 1 ♀, Oracle, May 6, 1951 (Butler); 1 ♀, Oak Creek Canyon, May 28, 1954 (Butler, on *Opuntia*). Previously recorded from Colorado, Oklahoma, Texas, Utah, Nebraska, New Mexico, South Dakota and Wyoming.

## MEGACHILE (XEROMEGACHILE) INSTITA Mitchell

California: 1 ♂, Susan River Camp, Lassen County, July 10, 1949 (Ehrhardt). Arizona: 1 ♂, Ray, May 18, 1954 (Werner, on *Acacia*). Recorded previously from New Mexico and from Sonora, Mexico.

## MEGACHILE (XEROMEGACHILE) MOJAVENSIS Mitchell

Arizona: May, on *Aster*. Previously recorded only from California.

## MEGACHILE (XEROMEGACHILE) MUCOROSA Cockerell

Arizona: 1 ♂, Pearce, July 27, 1954 (Butler & Werner, on *Helianthus*). Recorded previously from Colorado, Kansas, Texas and Nebraska.

## MEGACHILE (XEROMEGACHILE) NEVADENSIS Cresson

The collection of a male in Louisiana extends the known range of this species considerably to the east. Previously, none of this species has been recorded east of New Mexico. The record is as follows: 1 ♂, Winnfield, Louisiana, May 12, 1918 (H. C. Fall). Previous State records include California, Oregon, Washington, Idaho, Nevada, Utah, New Mexico, and Wyoming.

## MEGACHILE (XEROMEGACHILE) PALMENSIS Mitchell

Arizona: 1 ♀, Oracle, May 6, 1951 (G. D. Butler). Recorded previously from California.

## MEGACHILE (XEROMEGACHILE) SUBNIGRA ANGELICA Mitchell

Arizona: 1 ♂, B. Thompson Arbor, Superior, May 3, 1953 (G. D. Butler, on *Aster*). Recorded previously from California, Oregon and Idaho, April-June.

## MEGACHILE (XEROMEGACHILE) SUBNIGRA SUBNIGRA Cresson

Utah: 1 ♀, Navajo L., June 17, 1940, 9,000 feet (R. M. Bohart). Recorded previously from California, Oregon, Washington, Idaho, Nevada and Wyoming.

## MEGACHILE (DEROTROPIS) ANOGRAE Cockerell

Kansas: 1 ♀, Wallace County, July 11. Recorded from Colorado, Nebraska, Texas, Montana, Oregon and California, April–July.

## MEGACHILE (DEROTROPIS) MELANDERI Mitchell

California: 1 ♀, Westgard Pass, Inyo County, June 18, 1942 (R. Bohart). This is the only specimen, other than the type, so far found in any of the collections sent in for determination. The type locality is Marfa, Texas (Mitchell, 1944:140).

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THE ALBIZZIA PSYLLID, PSYLLA UNCATOIDES  
(FERRIS & KLYVER), IN CALIFORNIA

(Homoptera: Psyllidae)

D. D. JENSEN

*University of California, Berkeley*

In April, 1955, J. Duncan Graham found a heavy infestation of psyllids on his ornamental trees, *Albizzia julibrissin* Durazz., at Benicia, California. Specimens were submitted to the writer for identification. The species proved to be *Psylla (Psyllia) uncatoides*, described by Ferris and Klyver (1932) and known previously only from New Zealand. The species is being retained in the genus *Psylla* despite the proposal by Heslop-Harrison (1949) that it be included in the genus *Acizzia* Heslop-Harrison, 1951 (= *Neopsylla* Heslop-Harrison, *nec* Wagner, 1903).

Infestations of *Psylla uncatoides* were found in Berkeley soon after the discovery at Benicia and suggested that the species was already well established in the area. The California Department of Agriculture was informed of the presence of this immigrant psyllid and a quick survey conducted by State inspectors revealed the species to occur on *Acacia* and *Albizzia* in the coastal region of California from Sonoma County south to San Diego County (Armitage, 1955). Subsequently, a nymph, collected on *Acacia* sp. at